Computer Science Concentrations

Computers Engineering Technology: This program prepares students for employment in an entry-level position as a computer technician. The coursework focuses on the diagnosis and repair of hardware and software in micro, mini, and mainframe computers. With minimal additional specialized training, students may become a field or in-house shop technician.

Computer Information Administration: Will prepare students for careers in the field of PC support specialist, help desk specialist, microcomputer specialist, software specialist, and information systems specialist.

Computer Programming and Analysis: This program prepares students for jobs in the field of computer programmer aide, junior programmer, senior programmer, data manager, programmer analyst, and midrange computer specialist.

Database Technology: Several academic programs within this field of study allow the student to match their skills to the appropriate area. Microsoft Certified Database Administrator prepares students for MCDBA certification. Microsoft Certified Solution Developer prepares students for MCCDO certification.

Digital/Multimedia Technology: Will prepare students for careers such as desktop publisher, production designer, electronic publisher, Illustrator, multimedia specialist, and many more options.

Electronics Engineering Technology: Prepares students for an entry-level position as an electronics engineering technician. Technicians assist engineers in planning, research, development, and design.

Game Design & Development: Will prepare students for careers in the fast-growing field of game design, game development, and digital art development.

State-of-the-Art Facilities

Dedicated Faculty & Staff

You can find the Dale Mabry Computer Science Department on the fourth floor of the Technology Building. Our state-of-the-art laboratories are staffed by knowledgeable and industry-certified technicians six days a week. Experienced and passionate faculty hold advanced computer science degrees from universities throughout the United States. Our department as a whole is dedicated to your educational success.

HCC’s Dale Mabry Campus offers a diverse selection of computer science concentrations to our students. Compute this fact: Employment in the computer science industry is expected to increase much faster than the average as organizations continue to expand their use of technology. HCC offers traditional classroom instruction and online certifications, associate in applied science degrees and college credit certificates.

Information Technology Security: Preparing students for employment as an information technology security professional, enabling business and industry in developing and implementing strategies to defend company e-business infrastructure and data networks against security threats.

Internet Service Technology: This program will prepare individuals to design internet websites. Preparing students for careers in web designer or developer, site designer or developer, and Internet architects or programmers.

Network Administration: Will prepare students for jobs such as computer network specialist, network administrator, customer support analyst, telecom analyst, project coordinator, system installer, and network systems engineers.

Unix/Linux System Administrator: The content of this program prepares individuals to install information technology equipment, troubleshoot information technology equipment, and support information technology users.

Programs of Study

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Programs of Study
MEET HCC’S COMPUTER SCIENCE DEPARTMENT’S NEWEST PROGRAMS

AS Degree & Certificate

CIS 2541 Database Design
Software featured: Oracle DBMS and SQL Access. Perform database design and introductory SQL. Offered fall and spring semesters and summer session.

CIS 2440 Database Programming – SQL
Software featured: Oracle DBMS and SQL Server. Perform hands-on exercises using Structured Query Language (ASQL, SQL). Offered fall and spring semesters. Formerly: COP 2760

CIS 2441 Database Administration I
Software featured: Oracle DBMS and SQL Server. Perform entry level database administration to include security, architecture maintenance, and more. Offered spring semester. Formerly: COP 2741

CIS 2442 Database Administration II
Software featured: Oracle DBMS and SQL Server. Perform advanced database administration to include performance tuning, backup and recovery and more. Offered fall semester. Formerly: COP 2742

CIS 2445 Advanced Database Programming
Software featured: Oracle DBMS and SQL Server. Perform advanced database programming with PL/SQL (Oracle) or TSQL (SQL Server). Offered fall semester. Formerly: COP 2745

Hillsborough Community College Dale Mabry Campus
For more information, contact:
J. Ronald Leake - jleake@hccfl.edu
Dr. Sherry Kersey - skersey@hccfl.edu

UNIX / LINUX

CIS 1760 Introduction to UNIX 3cr.
CIS 2763 UNIX/Linux Administration I 3cr.
CIS 2764 UNIX/Linux Administration II 3cr.
COP 2344 Shell Scripting 3cr.
CTS 2311 UNIX/Linux Security 3cr.
CTS 2321 UNIX/Linux Networking 3cr.

The purpose of this program is to prepare students for employment as a Unix or Linux system administrator or to provide supplemental training for persons previously or currently employed in these occupations. The content prepares individuals to install information technology equipment, troubleshoot information technology equipment, and support information technology users.

For more information, contact Wayne Pollock - wpollock@hccfl.edu.

Microcomputer Repairer/Installer (A+)

CET 1114C Basic Digital Electronics 3 cr.
Introduction to basic digital electronics. Topics covered in this course are computer memory systems, Boolean algebra, combinational logic circuits, logic family characteristics, and flip-flops.

CET 1112C Computer Upgrade and Repair 3 cr.
Covers the knowledge and skills necessary for upgrading and repairing the hardware of a typical personal computer (PC). Includes the study of microprocessors, basic bus and input/output (I/O) interface types, and the types of semiconductor memories found in a typical PC. This course will further prepare the student for the A+ certification test.

CET 1114C Advanced Computer Repair 3 cr.
This course is for someone working in a computer-related field or who has completed CET 1112C. The course provides hands-on PC repair experience, based on A+ certification guidelines.

CIS 1550 Introduction to Networking 3 cr.
Introduction to the basics of local area networks. Students are introduced to major network components with a discussion of critical selection considerations. Covers the concepts necessary for the Microsoft program and will provide background information for the Cisco certification program.

EET 1083C Electronics Orientation 3 cr.
Provides an introduction to computer operating systems and to computer programs written in the use of electronic circuits. Also covers the use of electronics laboratory equipment such as digital multimeters, oscilloscopes, function generators, breadboards, and frames used in the program.
For more information, contact: Dr. Sherry Kersey - sherrye@hccfl.edu.

Cisco CCNA

This certificate is designed to prepare students for employment as telecommunications system engineers, telecommunications specialists, network support technicians, network system specialists, and field support engineers as it relates to Cisco-based networks that include local area and wide area network routers and switches.

CET 1600 Cisco Network Fundamentals 3cr.

CET 1610 Cisco Router Technology 3cr.

CET 2615 Cisco Advanced Router Technology 3cr.

CET 2620 Cisco Wide-Area Networking Technologies 3cr.

For more information, contact Ed Sloan - esloan@hccfl.edu.